

Exhibit 5

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

DROPLETS, INC.

Plaintiff,

vs.

**E*TRADE FINANCIAL CORPORATION
ET AL**

Defendant(s).

**Civil Action No. 1:12-cv-02326-CM
ECF CASE**

JURY TRIAL

**PLAINTIFF DROPLETS, INC.'S SUPPLEMENTAL CLAIM CONSTRUCTION
STATEMENT**

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TABLE OF EXHIBITS

EXHIBIT	DESCRIPTION
A	United States Patent No. 6,687,745, including Re-Examination Certificate
B	United States Patent No. 7,502,838
C	Excerpts of Google - Company - Our History in Depth, retrieved from http://www.google.com/about/company/history/ April 29, 2013
D	Key Facts - Facebook Newsroom, retrieved from http://newsroom.fb.com/Key-Facts on May 3, 2013
E	Wired.com - Sept. 28, 1998: Internet Explorer Leaves Netscape in Its Wake, retrieved from http://www.wired.com/thisdayintech/2009/09/0928ie-beats-netscape/ on May 3, 2013
F	International Telecommunications Union - Top 20 Online Service Providers, 1999, retrieved from http://www.itu.int/ITU-D/ict/statistics/at_glance/Top20ISP.html on May 3, 2013
G	Excerpts of Federal Communications Commission Releases Data on High-Speed Services for Internet Access, 1999, retrieved from http://transition.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/hspd1000.pdf on May 6, 2013
H	Excerpts of Federal Communications Commission Releases Data on High-Speed Services for Internet Access, 2004, retrieved from http://transition.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/hspd0705.pdf on May 6, 2013
I	Excerpts of Federal Communications Commission Releases Data on High-Speed Services for Internet Access, 2008, retrieved from http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296239A1.pdf on May 6, 2013
J	Excerpts of Federal Communications Commission Releases Data on High-Speed Services for Internet Access, 2011, retrieved from http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-314630A1.pdf on May 6, 2013
K	ETRADE.com Home Page, February 24, 1999, retrieved from http://web.archive.org/web/19990224013923/http://www.etrade.com/cgi-bin/gx.cgi/AppLogic+Home on May 7, 2013

L	Scottrade.com Home Page, November 29, 1999, retrieved from http://web.archive.org/web/19991129023113/http://www.scottrade.com/? on May 7, 2013
M	Ameritrade.com Home Page, November 29, 1999, retrieved from http://web.archive.org/web/19991129004310/http://www.ameritrade.com/? on May 7, 2013
N	Schwab.com Home Page, November 15, 1999, retrieved from http://web.archive.org/web/19991115223357/http://schwab.com/ on May 7, 2013
O	Excerpts of Archive.org - The Wayback Machine - Frequently Asked Questions, retrieved from http://archive.org/about/faqs.php#The_Wayback_Machine on May 3, 2013
P	ETRADE.com Home Page, April 29, 2013, retrieved from http://www.schwab.com on April 29, 2013
Q	Scottrade.com Home Page, April 29, 2013, retrieved from http://www.schwab.com on April 29, 2013
R	TD Ameritrade.com Home Page, April 29, 2013, retrieved from http://www.schwab.com on April 29, 2013
S	Schwab.com Home Page, April 29, 2013, retrieved from http://www.schwab.com on April 29, 2013
T	Declaration of David Berberian Jr., Executed May 10, 2013
U	Complaint (without exhibits), Filed July 31, 2006, Droplets, Inc. v. Adobe Systems Incorporation, No. 2:06-cv-307, Eastern District of Texas
V	Excerpts of Docket Listing, Droplets, Inc. v. Adobe Systems Incorporation, No. 2:06-cv-307, Eastern District of Texas, retrieved on May 8, 2013
W	Excerpts of Docket Listing, Droplets, Inc. v. eBay, Inc., No. 2:11-cv-401, Eastern District of Texas, retrieved on May 10, 2013
X	Excerpts of Docket Listing, Droplets, Inc. v. Amazon.com, Inc., No. 5:12-cv-3733, Northern District of California, retrieved on May 10, 2013
Y	Excerpts of Docket Listing, Droplets, Inc. v. Williams-Sonoma, Inc., No. 5:12-cv-4047, Northern District of California, retrieved on May 10, 2013

Z	Excerpts of Docket Listing, Droplets, Inc. v. Nordstrom, Inc., No. 5:12-cv-4049, Northern District of California, retrieved on May 10, 2013
AA	Order Dismissing Google, Dkt. 234, Droplets, Inc. v. Amazon.com, Inc., No. 5:12-cv-3733, Northern District of California
BB	Order Dismissing YouTube, Dkt. 233, Droplets, Inc. v. Amazon.com, Inc., No. 5:12-cv-3733, Northern District of California
CC	Order Dismissing Facebook, Dkt. 236, Droplets, Inc. v. Amazon.com, Inc., No. 5:12-cv-3733, Northern District of California
DD	Order Dismissing Amazon, Dkt. 228, Droplets, Inc. v. Amazon.com, Inc., No. 5:12-cv-3733, Northern District of California
EE	Order Dismissing Apple, Dkt. 229, Droplets, Inc. v. Amazon.com, Inc., No. 5:12-cv-3733, Northern District of California
FF	Order Dismissing eBay, Dkt. 156, Droplets, Inc. v. eBay, Inc., No. 2:11-cv-401, Eastern District of Texas
GG	Order Dismissing Target, Dkt. 43, Droplets, Inc. v. Target Corp., No. 2:12-cv-391, Eastern District of Texas
HH	Order Dismissing Merrill Lynch entities, Dkt. 198, Droplets, Inc. v. E*Trade Fin. Corp., No. 1:12-cv-2326, Southern District of New York
II	Order Dismissing OptionsHouse entities, Dkt. 202, Droplets, Inc. v. E*Trade Fin. Corp., No. 1:12-cv-2326, Southern District of New York
JJ	Order Dismissing Zecco entities, Dkt. 201, Droplets, Inc. v. E*Trade Fin. Corp., No. 1:12-cv-2326, Southern District of New York
KK	July 2, 2009 Office Action Response During Re-Examination of '745 Patent
LL	Exhibit A to Joint Claim Construction and Prehearing Statement, Dkt. 134, Droplets, Inc. v. eBay, Inc., No. 2:11-cv-401, Eastern District of Texas
MM	January 15, 2013 Office Action Response During Re-Examination of '838 Patent
NN	MGM Technology Partners techblog - Must-Know URL Hash Techniques for AJAX Applications, retrieved from http://blog.mgm-tp.com/2011/10/must-know-url-hashtechniques-for-ajax-applications/ on May 10, 2013.

OO	Ars Technica, Time capsule: The Rough Guide to the Internet...from 1999, retrieved from http://arstechnica.com/tech-policy/2009/12/time-capsule-the-rough-guide-to-the-internet-from-1999/ on November 15, 2013
PP	Declaration of David Martin, PhD, Executed November 15, 2013
QQ	Declaration of Lou Franco, Executed November 14, 2013
RR	MGM Technology Partners techblog - Must-Know URL Hash Techniques for AJAX Applications, retrieved from http://blog.mgm-tp.com/2011/10/must-know-url-hashtechiques-for-ajax-applications/ on November 15, 2013.
SS	Excerpted Chapter 1 from HOLDENER, AJAX: THE DEFINITIVE GUIDE (2008)
TT	Content With Style, Fixing the Back Button and Enabling Bookmarking for AJAX Apps, retrieved from http://www.contentwithstyle.co.uk/content/fixing-the-back-button-and-enabling-bookmarking-for-ajax-apps/ on November 15, 2013
UU	MICROSOFT PRESS COMPUTER DICTIONARY (1997, 3d Ed.)

TABLE OF ABBREVIATIONS

“’745 Patent”	Refers to U.S. Patent No. 6,687,745
“Defendants”	Collectively refers to all defendants currently in this litigation, including: Charles Schwab, E*TRADE, Scottrade, and TD Ameritrade
“D.Br.”	Refers to Defendants’ Opening Claim Construction Statement (Dkt. 207)
“D.Resp.Br.”	Refers to Defendants’ Responsive Claim Construction Statement (Dkt. 211)
“Droplets”	Refers to Droplets, Inc.
“Ex.”	For Exs. A–NN, refers to the corresponding Exhibit of the Declaration of Josh Budwin submitted with Droplets’ O.Br. For Exs. OO–UU, refers to the corresponding Exhibit of the Declaration of James Quigley submitted with this brief.
“O.Br.”	Refers to Droplets’ Opening Claim Construction Statement (Dkt. 206)
“O.Resp.Br.”	Refers to Droplets’ Responsive Claim Construction Statement (Dkt. 210)

Pursuant to the Court’s claim construction Order of October 21, 2013 (the “Order”), Droplets respectfully submits this brief and attachments regarding the difference in meaning of certain terms between the 1998-1999 timeframe and today.

Specifically, the Order construed “interactive link” to include, among other things, “facilities for restoring previous operating states of the application as the application is re-presented at a user’s computer.” Dkt. 218 at 11-12. Defendants requested the addition of another sentence: “An interactive link cannot be a bookmark, cookie, shortcut, hyperlink or Internet address (URL)” (the “Proposed Sentence”). The Court requested extrinsic evidence regarding whether the meanings of the terms in the Proposed Sentence have changed over time. *Id.* at 13.

I. INTRODUCTION

There can be little doubt that the Internet has changed radically since the late 1990s. Indeed, the World Wide Web was not meaningfully commercialized until the late 1990s. 1998 and 1999 were the years of the Internet revolution, with new technologies emerging on a regular basis. Microsoft’s Internet Explorer was not launched until 1995, and Google was not even launched until late 1998.

The Internet was in its infancy on September 14, 1999, when the provisional application leading to the ’745 Patent was filed. Since 1999, the Internet has been “fundamentally reshaped” with new technologies and companies like Google, Facebook, Twitter and others coming to the forefront.¹ In 1999, terms such as bookmark, shortcut, hyperlink, and URL were understood by those of ordinary skill in the art to refer to simple textual strings pointing to web page locations. Today, more than fourteen years later, the meanings and understandings of these terms—like the

¹ See e.g., Ex. OO at 1, 2–3 (<http://arstechnica.com/tech-policy/2009/12/time-capsule-the-rough-guide-to-the-internet-from-1999/>) (describing the Internet in 1999 as having an “amateur do-it-yourselfness” quality as compared to the Internet today).

rest of the web and Internet—have changed. Now, bookmarks, shortcuts, hyperlinks, and URLs are capable of including information beyond the mere location of web pages, such as information related to the state of an application running within a web page, among other things.

The Proposed Sentence fails to take into account the technological evolution of the Internet and the meanings of the terms bookmarks, shortcuts, hyperlinks, and URLs over the past fourteen years. Defendants’ Proposed Sentence encompasses far more than the alleged disclaimer in the prosecution history of the ’745 Patent encompassed, or could have encompassed. It would be contrary to well-established case law to build modern-day definitions and understandings of technical terms into a claim construction based on an understanding from more than fourteen years ago—claims should be construed with the understanding of one of ordinary skill in the art at the time of invention.

At a more fundamental level, there is no need for the Proposed Sentence in light of the Court’s current construction of “interactive link.” The prior art included bookmarks, shortcuts, hyperlinks, and URLs as those terms were used and understood at the time of the invention. The prosecution history makes clear that the term “interactive link” was distinguished from this prior art because the prior art did not include “facilities for restoring previous operating states of the application as the application is re-presented at a user’s computer” (the “Facilities Clause”). And the Facilities Clause is now part of the Court’s claim construction. There is therefore no need for the Proposed Sentence. The relevant, distinguished prior art has already been addressed through the Facilities Clause.

Accordingly, Droplets respectfully requests that the Court reject Defendants’ suggestion of including the Proposed Sentence in the construction of “interactive link.”

II. LEGAL AUTHORITY

Claims are to be construed with the understanding of one of ordinary skill in the art “*at the time*

of invention.” *Eolas Techs. Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1336 (Fed. Cir. 2005) (emphasis added); *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1316–17 (Fed. Cir. 2005); *Ferguson Beauregard/Logic Controls v. Mega Systems, LLC*, 350 F.3d 1327, 1348 (Fed. Cir. 2003) (Rader, J., concurring) (definitions of words “vary[] over time as the language evolves.”). “Since the ordinary meaning of words may change over time, the Court must limit its analysis to dictionaries and treatises that are informative of the ordinary meaning of the claim terms as of the time the patent issued.” *MOSAID Techs. v. Samsung Elecs. Co.*, Nos. 01-CV-4340 (WJM) & 03-CV-4698 (WJM), 2004 U.S. Dist. LEXIS 27636, at *18–19 (D.N.J. Mar. 23, 2004) (citing *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1299 (Fed. Cir. 2003)); *Intell-A-Check Corp. v. AutoScribe Corp.*, 346 F. Supp. 2d 698, 703 (D.N.J. 2004); *see also Phillips*, 415 F.3d at 1316–17. The possibility of change in meaning over time is important as infringement may be found even if the accused technology is later-developed. *Innogenics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1371-72 (Fed. Cir. 2008) (“Our case law allows for afterarising technology to be captured within the literal scope of valid claims that are drafted broadly enough.”).

III. ARGUMENT

A. Bookmarks, Shortcuts, Hyperlinks, And URLs Have Evolved In Material Respects Over The Past Fourteen Years.

The ’745 Patent’s provisional application was filed on September 14, 1999. Ex. A at 1. In the specification and prosecution history of the ’745 Patent, plain text URLs, hyperlinks, bookmarks and cookies are described *as they existed and were commonly understood at the time* the application was filed. The claimed “interactive link” was differentiated from the then existing plain text prior art bookmarks, shortcuts, hyperlinks, and URLs because they did not “include facilities for restoring previous operating states of the application.” Ex. A at 3:66-4:5; *see also*

D.Br. at 8. The then existing plain text prior art bookmarks, shortcuts, hyperlinks, and URLs merely pointed to *locations* on the web or Internet. *See* Section III.C, *infra*.

In contrast with the prior art, today’s bookmarks, shortcuts, hyperlinks, and URLs can “include facilities for restoring previous operating states of the application,” when used by applications capable of deciphering them. This evolution in the meaning of these terms over the past fourteen years is critical to the construction of “interactive link.” *See Eolas*, 399 F.3d at 1336; *see also Ferguson*, 350 F.3d at 1348 (Rader, J., concurring); *Intell-A-Check*, 346 F. Supp. 2d at 703; *MOSAID Techs.*, 2004 U.S. Dist. LEXIS 27636, at *18–19.

Summarized below are three sources of information demonstrating this evolution: (1) an expert who was one of at least ordinary skill in the art at the time of the invention; (2) an inventor of the ’745 Patent; and (3) publicly available treatises and discussions. These sources are attached hereto as exhibits.

1. Expert Testimony Demonstrates The Evolution Of Bookmarks, Shortcuts, Hyperlinks, And URLs Over The Past Fourteen Years.

Attached hereto is the Declaration of Dr. David Martin (Ex. PP), an academic and expert in the computer science field. Dr. Martin has worked with the Internet and associated technologies since the late 1980’s. Ex. PP ¶ 2. After receiving his B.S. in Computer Science and Mathematics in 1993, Dr. Martin received his Ph.D. in Computer Science from Boston University in 1999. *Id.* ¶ 2. Thus, Dr. Martin was someone having at least ordinary skill in the art in the 1998-1999 timeframe. *See* O.Br. at 9.

As a threshold matter, Dr. Martin notes that he understands the terms “hyperlink” and “URL” to be generally synonymous—both in the 1998-1999 timeframe and today, though as discussed herein, the meaning of these synonymous terms has changed over that time period. Ex. PP ¶ 4. Dr. Martin also understands the terms “bookmark” and “shortcut” to generally refer to a

“hyperlink” or “URL” (from their respective time period) that has been stored for future recall. *Id.* ¶ 4. Accordingly, while Dr. Martin’s Declaration focuses on the term “URL,” it applies equally to the related terms “hyperlink,” “bookmark” and “shortcut”—and similarly the discussion in this brief of differences between the 1998-1999 timeframe and today also focuses on “URL,” but applies equally to “hyperlink,” “bookmark” and “shortcut.”

Before reviewing Dr. Martin’s detailed explanation and analysis, his conclusion is as follows:

As I explain in further detail below, my conclusion is that, to a person having ordinary skill in the art, the meanings and understandings of the “bookmark”, “shortcut”, “hyperlink”, and “URL” terms and their synonyms have indeed changed since 1999. Briefly, in 1999, a hyperlink/shortcut named a web page or other resource that a web browser may obtain from a server and display to a user. Today, it is also recognized that a hyperlink/shortcut can store state information for a script application running within a web browser. In my experience, hyperlinks were not thought of in this way in the 1999 timeframe.

Id. ¶ 5.

In arriving at his conclusion, Dr. Martin discusses the portion of the URL coming after the ‘#’ character in many URLs—called the “fragment identifier.” He explains that the fragment identifier illustrates the change in understanding of bookmarks, shortcuts, hyperlinks, and URLs since 1999. *Id.* ¶¶ 6–30. In the 1999 timeframe, web pages typically were used to view documents stored elsewhere on the web or Internet, using a simple bookmark, shortcut, hyperlink, or URL to point to the location of the document on the web or Internet. *Id.* ¶¶ 7–9. That is, web browsers were used merely as display mechanisms for remotely stored documents (*e.g.*, HTML pages, images, and similar), and bookmarks, shortcuts, hyperlinks, and URLs were used merely as pointers to the remote locations. *Id.*

As web browsers and client computer technology developed, web designers came to

understand that the fragment identifier portion of a URL could be repurposed to identify various aspects of applications running within web pages, such as the state of the application. *Id.* ¶¶ 10–13. Thus, the URLs of today are commonly understood to be capable of doing more than merely point to the remote locations of documents; they can also, among other things, include certain application information (*e.g.*, application state). *Id.* ¶¶ 5, 13–20.

Google’s² Groups application provides helpful insight into how a fragment identifier works in today’s URLs (which is different than URLs of 1999).³ *Id.* ¶¶ 14–18. The first Google Groups page Dr. Martin shows refers to the main portion of the application, which is accessed by going to the URL <https://groups.google.com/forum/>. *Id.* ¶ 15. Going to this location leads to the display of <https://groups.google.com/forum/#!overview>, the default state of the Google Groups application. *Id.* The “#!overview” part of the URL is a fragment identifier, which the Google Groups application inspects in order to decide what to display to the user. *Id.* In this case, the “#!overview” fragment identifier relates to the default Google Groups application state. *Id.* The user can make a bookmark of that URL, which would cause Google Groups to return to this overview screen when the bookmark is recalled. *Id.*

² Google is a licensee of the ’745 Patent. O.Br. at 6.

³ Google Groups is one of many Google properties (others include Maps, Mail, and Finance). It can be used by groups of Google users to discuss various topics.

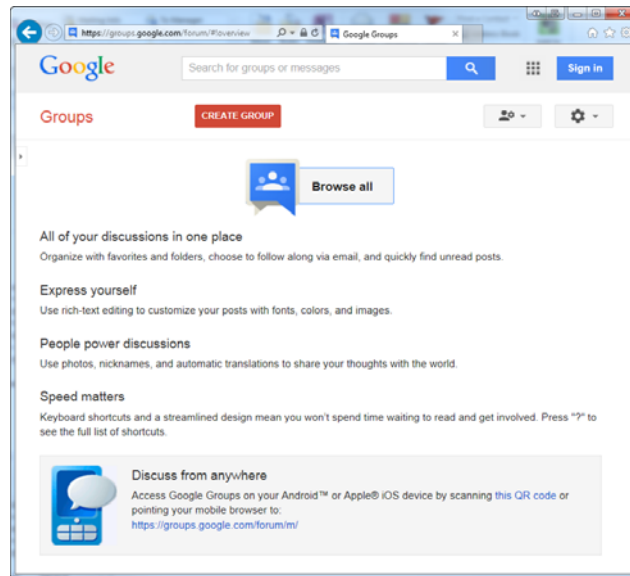


Figure 2: Internet Explorer 10 navigating to <https://groups.google.com/forum/> and resulting in a display of <https://groups.google.com/forum/#!overview>

Id. Fig. 2.

The second Google Groups page Dr. Martin shows is accessed by going to another URL ([https://groups.google.com/forum/#!search/ancient\\$20history](https://groups.google.com/forum/#!search/ancient$20history)), and refers to a different, specific state of the Google Groups application. *Id.* ¶¶ 16–17. In this case, that specific state is search results for a specific search string (“ancient history”). *Id.*

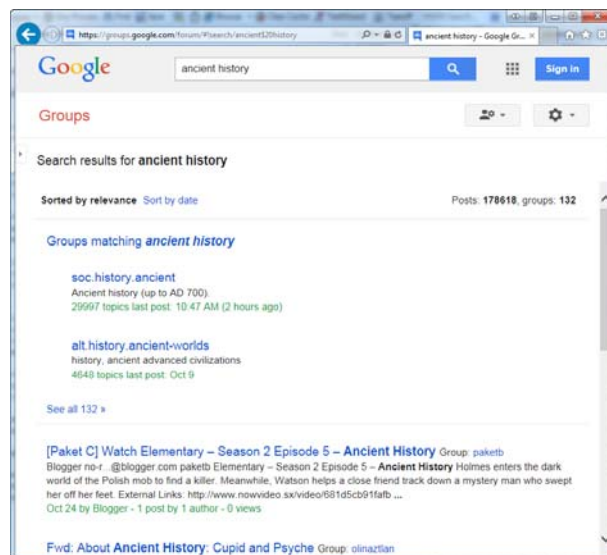


Figure 3: Search results for “ancient history”

Id. Fig. 3.

Dr. Martin’s explanation of the second example from the Google Groups application (Figure 3) is helpful in understanding the evolution of URLs. Specifically, in the URL for the second example (Figure 3), the specific web page requested is the first portion of the URL (<https://groups.google.com/forum/>), and is the same web page requested in the first example (<https://groups.google.com/forum/>). *Id.* ¶ 17. The difference between the two example web pages comes in the fragment identifier portion of the URLs. The fragment identifier of the second URL ([#!search/ancient\\$20history](#)), which indicates to the Google Groups application that the application’s state should be restored by running in the application in the client’s web browser a search task for “ancient history” and displaying the results. *Id.* ¶¶ 17–18. As Dr. Martin explains: “To the user, this sequence of events looks like two different web pages . . . but in fact, both are views of different aspects of the same Google Groups application.” *Id.* ¶ 18.

Until approximately 2005, the term “URL” was not commonly understood to include these techniques for storing state information within a URL. An online discussion of computer programming techniques (discussed by Dr. Martin in his Declaration) confirms this. *Id.* ¶ 19.

The understanding of URLs and fragment identifiers today stands in stark contrast with the previous understanding of URLs and fragment identifiers. Historically, fragment identifiers were used as “anchors” within web pages, which merely identified a position within a web page (for example, a specific chapter of an entire book that is within an HTML web page or a specific image somewhere on a web page). *Id.* ¶¶ 21–27. As Dr. Martin explains, version 4.01 of the HTML specification,⁴ from December 1999, shows that “anchors” within web pages only caused a web browser to display a particular portion of a web page. *Id.* ¶ 26. They did not provide any state information. Dr. Martin also shows how, for example, the website for the World Wide Web

⁴ HTML is the computer programming language commonly used to create web pages. Ex. PP ¶ 22.

Consortium (“W3C”)—the organization responsible for promulgating the HTML standard—used “anchors” in this very same, stateless, manner in December of 1999. *Id.* ¶ 26.

Finally, Dr. Martin’s academic teaching in and around 1999 confirms that those of ordinary skill in the art at the time did not understand bookmarks, shortcuts, hyperlinks, or URLs to “include facilities for restoring previous operating states of the application.” Between 1999 and 2001, Dr. Martin was teaching computer science courses to undergraduate and graduate students at the University of Denver, which included discussions of web technologies. *Id.* ¶ 31. Within those web technology discussions, Dr. Martin did not teach his students (nor did Dr. Martin know) to use bookmarks, shortcuts, hyperlinks, or URLs to store state information for applications run in web browsers. *Id.* ¶ 32. Dr. Martin also did not teach his students (nor did Dr. Martin know) to store state information within URLs. *Id.* That Dr. Martin—one of at least ordinary skill in the art—was not teaching other persons of ordinary skill (graduate students) or soon to be of ordinary skill (undergraduate students) (*see* O.Br. at 9) to include state information in URLs, confirms the limited understanding of bookmarks, shortcuts, hyperlinks, and URLs in 1999.

2. Inventor Testimony Demonstrates The Evolution Of Bookmarks, Shortcuts, Hyperlinks, And URLs Over The Past Fourteen Years.

The Declaration from Lou Franco, an inventor of the ’745 Patent, is also attached hereto. *See* Ex. QQ. Mr. Franco received a B.S. in Engineering from The Cooper Union in 1992 and has over 20 years of software development experience. *Id.* ¶ 2. Mr. Franco was hired by a predecessor of Droplets in 1997 to develop a web-based platform and applications that had the features of desktop counterparts, and those development efforts led to the inventions described in the ’745 Patent and other related patents. *See id.* ¶¶ 3–4. While conceiving of and developing the inventions of the patents between 1997 and 1999, Mr. Franco extensively researched the state of

the art at the time. *See id.* ¶ 3. This extensive research failed to identify “a way to use a URL, hyperlink, shortcut, or bookmark to include information that could be used to restore an application’s state.” *See id.* ¶ 3.

3. Public Treatises And Discussions Confirm That The Use And Understanding Of Bookmarks, Shortcuts, Hyperlinks, And URLs Has Evolved Over The Past Fourteen Years.

Public discussions regarding the evolution of the web are also helpful in demonstrating the evolution of the use and understanding of bookmarks, shortcuts, hyperlinks, and URLs over the past fourteen years. Attached as Ex. RR is a blog post by Dr. Christian Winkler entitled “Must-Know URL Hash Techniques for AJAX Applications” (“Winkler”).⁵ In discussing the evolution of the Internet “From Stateless Web Sites to Single-Page Web Applications,” Winkler notes: “*In the beginning, the web was stateless. . . .* Most web sites were purely informational and content-driven like e.g. newspapers and similar. New content was requested via navigating URLs and a whole new page with a new URL was shown.” Ex. RR at 1 (emphasis in original). Winkler notes that even when cookies could be used for state or session information, “the HTTP requests were still stateless.”⁶ *Id.* Winkler further notes that “[t]he situation changed again when more and more Javascript was used,” and goes on to explain that unlike the Internet of 1999, developers now “Cod[e] the Application State into the URL.” *Id.* This is done using the information following the “#” in a web address (*e.g.*, in www.web.com/url#2, the “2” following the “#” relates to state information). *See id.* at 1–2. The “#2” is the “fragment identifier”

⁵ AJAX, which stands for Asynchronous JavaScript and XML, is a group of web development techniques used to create asynchronous web applications. *See generally* Ex. SS at 4–5.

⁶ As discussed herein, no disclaimer exists as to “cookies” (Section III.B, *infra*), and inventions claimed in patents can build upon and include previously known ideas within the claimed invention as a whole (Section III.D, *infra*).

discussed by Dr. Martin. *See supra*, Section III.A.1.⁷ Winkler provides examples of how the fragment identifier portion of URLs provides state information, including in combination with AJAX and HTML5:

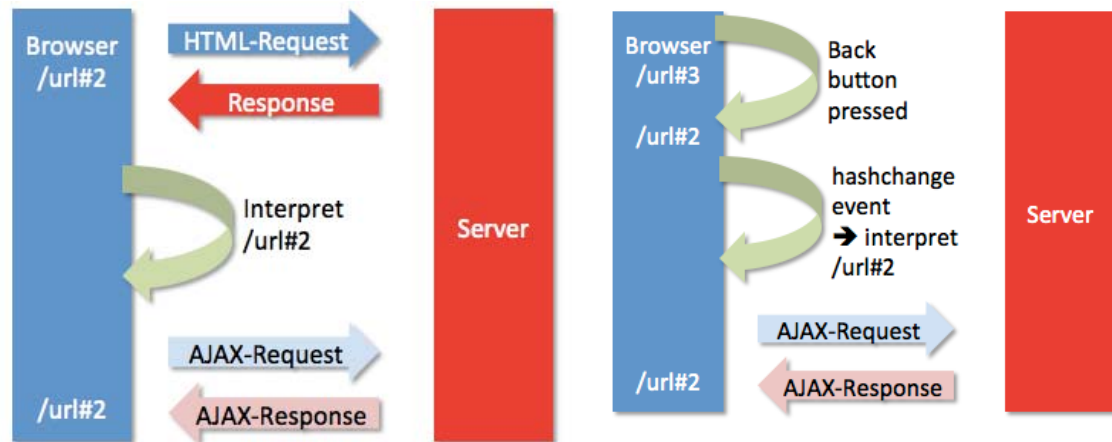


Figure: Reconstructing the page state from a bookmark.

Figure: Reconstructing the previous page state when the user presses the back button.

Ex. RR at 1–2.

Other public sources confirm that use of the fragment identifier in relation to state information became common long after the 1998-1999 timeframe. *See* Ex. TT at 2 (<http://www.contentwithstyle.co.uk/content/fixing-the-back-button-and-enabling-bookmarking-for-ajax-apps/>) (In a 2005 web post, noting: “So, I’m trying to store the session state in the address bar to allow bookmarking. What can be changed in the URL that won’t trigger a page reload? The hash portion. So what I need to do is add my AJAX application’s parameters after a #.”). As Dr. Martin describes, in the 1998-1999 timeframe the this fragment identifier was, in the 1998-1999 timeframe, used for “anchors”—a mere location within a web page, unrelated to state information. *See supra*, Section III.A.1.

⁷ Notably, and as discussed in Section III.A.1, *supra*, it is not merely the URL with state information that “include[s] facilities for restoring previous operating states of the application” Instead, it is the combination of the URL and code on the client that allows an application’s state to be restored. *See id.* That is, the application on the client can interpret and use the fragment identifier portion of the URL to restore a previous operating state. *See id.*

The stateless understanding of the terms at the time of the invention is underscored by their definitions from the third edition of MICROSOFT'S PRESS COMPUTER DICTIONARY published in 1997. There, the terms were defined as follows:

Term	MICROSOFT PRESS COMPUTER DICTIONARY Definition
Bookmark	1. A marker inserted at a specific point in a document to which the user may wish to return for later reference. 2. In Netscape Navigator, a link to a Web page or other URL that a user has stored in a local file in order to return to it later.
Hyperlink	A connection between an element in a hypertext document, such as a word, phrase, symbol, or image, and a different element in the document, another hypertext document, a file, or a script. The user activates the link by clicking on the linked element, which is usually underlined or in a color different from the rest of the document to indicate that the element is linked. Hyperlinks are indicated in a hypertext document through tags in markup languages such as SGML and HTML. These tags are usually not visible to the user.
Shortcut	In Windows 95, an icon on the desktop that the user can double-click on to immediately access a program, a text or data file, or a Web page.
URL ("Uniform Resource Locator")	An address for a resource on the internet. URLs are used by Web browsers to locate Internet resources. A URL specifies the protocol to be used in accessing the resource . . . , the name of the server on which the resource resides . . . , and, optionally, the path to a resource

Ex. UU (MICROSOFT PRESS COMPUTER DICTIONARY (1997, 3d Ed.)). None of these definitions discuss state information. Rather, they discuss locations of web pages or other documents on the web or Internet.

Finally, understanding the evolved meaning of terms such as bookmark, shortcut, hyperlink, and URL requires understanding the significant changes to the web after the 1998-1999 timeframe. The 2008 treatise entitled AJAX: THE DEFINITIVE GUIDE (Ex. SS) notes that "[b]ack in 1996, the Web was incredibly exciting, but not a whole lot was actually happening on web pages." Ex. SS at 3. "The most dynamic features on the pages were the updating of a

counter or time of day, or the changing of an advertising banner when a page reloaded. . . . Thinking back now, the Web at that time was a really boring place to surf.” *Id.* However, “[s]ince then, tools, standards, hardware technology, and browsers have changed so much that it is difficult to draw a comparison between what the Web was then and what it is today.” *Id.*

The AJAX treatise also includes an insightful case study of the web in 2000 (shortly after the filing of the provisional application leading to the ’745 Patent) versus 2005. The book notes that the web in 2000 was very rudimentary, requiring a completely new web page refresh or reload every time a new request was sent to a server. Ex. SS at 6–7 (“[N]othing about a web page was in any way dynamic. Every user interaction required a complete page reload”). This back and forth between client and server is detailed in the following figure (and is discussed in Dr. Martin’s Declaration at ¶¶ 8–9):

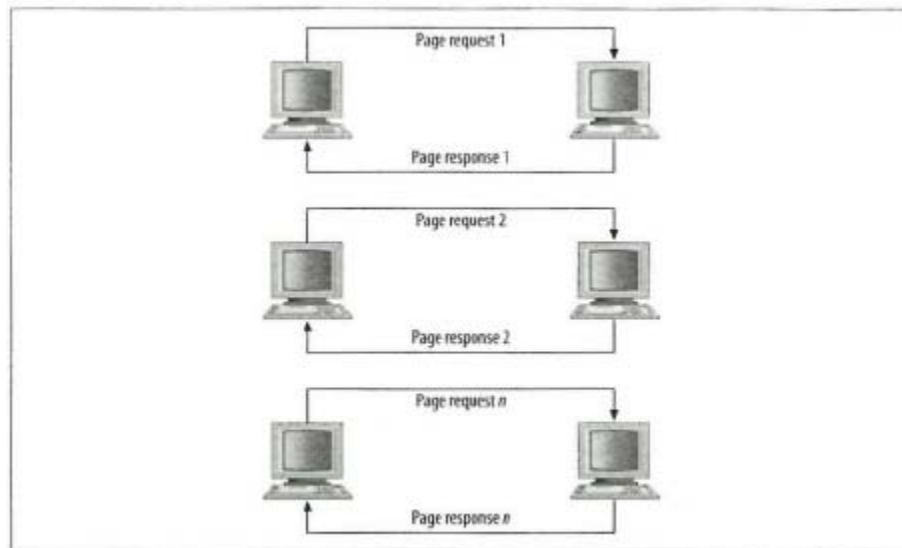


Figure 1-2. The flow of a typical interaction on the Web in 2000

Ex. SS at 7. In contrast, the web in 2005 had evolved to the point that such constant refreshing was no longer necessary and applications could be run within web pages. *See id.* at 7–9.

B. Defendants’ Alleged Disclaimers Do Not Include References To “Cookies.”

The discussion above centers of the understanding of the words “bookmarks,”

“shortcuts,” “hyperlinks,” and “URLs.” The word “cookies” should not be part of this list.

Defendants failed to show where any alleged disclaimer exists as to “cookies.” O.Resp.Br. at 10. In support of their disclaimer arguments, Defendants point to prosecution arguments made for the ’745 Patent with respect to the Gish, ICE-T, Dickman, and LeMole references. D.Br. at 9. But none of those arguments mention or refer to “cookies.” *See id.*; D.Resp.Br. at 4–5. Thus, there is no support in the prosecution for a clear and unmistakable disavowal of “cookies.” *Superguide Corp. v. DirecTV Enters.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (“[T]he prosecution history may not be used to infer the intentional narrowing of a claim absent the applicant’s clear disavowal of claim coverage.”).

C. Any Disclaimer Must Be Considered In The Context Of The Alleged Prior Art Distinguished In The Prosecution History.

The burden to find a disclaimer is significant. *Superguide*, 358 F.3d at 875. The prosecution history as a whole should be considered, not statements in isolation. *Elbex Video, Ltd. v. Sensormatic Elecs. Corp.*, 508 F.3d 1366, 1372 (Fed. Cir. 2007).

1. The Prosecution History Distinguished The Terms At Issue Using Their Understanding From The 1998-1999 Timeframe.

The Court’s claim construction ruling focuses on the alleged disclaimer of “bookmarks,” “shortcuts,” “hyperlinks,” and “URLs” to ensure that the patentee is not able to recapture that which was disclaimed during prosecution history. Droplets respectfully submits, however, that it is not necessary to make a factual determination as to such disclaimer to ensure that the patent does not cover the prior art. The statements in the prosecution history with respect to URLs and the like were for purposes of distinguishing the prior art. Specifically, the prior art URLs were distinguished because the then existing plain text, bookmarks, shortcuts, hyperlinks, and URLs did not include “facilities for restoring previous operating states of the application as the application is re-presented at a user’s computer.” This Facilities Clause is all that is necessary to

guard against the recapture mentioned above—*i.e.*, if the prior art includes such “facilities” (along with the other limitations in the claim), the claim will be invalid.

The “interactive link” term of the ’745 Patent was discussed during re-examination, at least with respect to the following pieces of prior art: Gish, Dickman, LeMole and ICE-T. *See, e.g.*, O.Br. at 20–21; O.Resp.Br. at 10–11. With respect to Gish and Dickman, the applicant explained that the art was only a simple URL, which while sometimes actionable, was not an “interactive link” because that simple URL did not include “facilities for restoring previous operating states of the application as the application is re-presented at a user’s computer.” *See* Ex. KK (7/2/09 ’745 Re-Exam OA Response) at 27–28 (discussing Gish), 34 (discussing Dickman). With respect to LeMole, the applicant explained that the art was simple bookmarks, simple URLs, and simple icons, which also did not include “facilities for restoring previous operating states of the application as the application is re-presented at a user’s computer.” *See id.* at 55–56. With respect to ICE-T, the art was a standalone application, and the applicant distinguished this art on that basis. *See id.* at 25–26.

In other words, prior art URLs and the like were distinguished on the basis that they did not have “facilities for restoring previous operating states of the application as the application is re-presented at a user’s computer.” Therefore, the Court’s construction of “interactive link” requiring these “facilities” already precludes use of prior art that only points to the location of a web page or resource, such as the simple bookmarks, shortcuts, hyperlinks, and URLs differentiated in the prosecution history. To include the words “bookmarks,” “shortcuts,” “hyperlinks,” and “URLs” in the claim construction is improper and will only serve to confuse the jury by introducing undefined and historically evolving terms that would be difficult or impossible for the jury to apply. Such words are not necessary because the prior art was

distinguished on the basis of the presence of “facilities,” which is already present in the Court’s claim construction.

2. The Prosecution History Demonstrates That Any Alleged Disclaimer Could Not Have Been Of Modern-Day Bookmarks, Shortcuts, Hyperlinks, and URLs.

The prosecution history also underscores that any alleged disclaimer related to simple bookmarks, simple URLs, simple icons, and the like did not include any disclaimer of “facilities for restoring previous operating states of the application as the application is re-presented at a user’s computer,” because no such facility existed at the time the patent was filed, and certainly did not exist within any of these prior art references. Therefore, any alleged disclaimer in light of Gish, Dickman, LeMole and ICE-T *cannot* be construed to include “facilities for restoring previous operating states of the application as the application is re-presented at a user’s computer”—like today’s bookmarks, shortcuts, hyperlinks and URLs—since such facilities were plainly missing from each of these references.

Reviewing Defendants’ alleged disclaimers illustrates the point. Both alleged disclaimers Defendants pointed to in their responsive claim construction brief deal with the outdated understandings of bookmarks, shortcuts, hyperlinks, and URLs. D.Resp.Br. at 4. Defendants point to the following ’745 reexamination quotes: (1) “Manual URL address input, books and special browser icons are not interactive links because they are simply browser elements that merely inform the browser program to *locate* a certain item” (Ex. KK at 55 (emphasis added)); and (2) “An internet shortcut is used by the operating system to launch a browser to retrieve resources that reside on the Internet at the *location* of the shortcut URLs and other *location information* are merely *location data*” (Ex. KK at 27 (emphases added)). In both of these examples, bookmarks, shortcuts, hyperlinks, and URLs are used in the outdated understanding discussed above—the understanding of the terms that refers only to a location on the web or

Internet. But as discussed in Section III.A, *supra*, today bookmarks, shortcuts, hyperlinks, and URLs are understood to include more than just location information, and this additional information includes information relating to an application’s operating state.

D. The Existence Of Bookmarks, Shortcuts, Cookies, Hyperlinks, Or URLs In The Prior Art Does Not Preclude Their Use In Meeting Claim Limitations.

While the ’745 Patent may have discussed “bookmarks,” “cookies,” “shortcuts,” “hyperlinks,” and “Internet addresses” as prior art in the pre-1999 context, Ex. A 3:35–65, that does not preclude their use in meeting the limitations, terms, and claims of the ’745 Patent. First, and as discussed above, the meaning of these terms has evolved over time. Second, and importantly, improvements on previous concepts are patentable. *See* 35 U.S.C. § 101 (“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, *or any new and useful improvement thereof*, may obtain a patent therefor”) (emphasis added). It is the claim in its entirety, not merely one limitation, which must be differentiable from the prior art.

IV. CONCLUSION

Droplets respectfully requests that the Court reject adding Defendants’ Proposed Sentence—“An interactive link cannot be a bookmark, cookie, shortcut, hyperlink or Internet address (URL)”—to the construction of “interactive link.”

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Respectfully submitted,
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CERTIFICATE OF SERVICE

The undersigned certifies that on this day, November 15, 2013, the following documents were served electronically, via ECF, on all counsel of record registered to receive ECF notifications in this case: the foregoing Supplemental Claim Construction Statement.

/s/ James E. Quigley